

CLAIMS

5

1. A toner having a surface to which a titanium black fine particle adheres, the titanium black fine particle having a property of being changed in color from black to white by flash light.

10

2. The toner as claimed in claim 1 characterized in that the titanium black fine particle is subjected to a hydrophobicity-providing treatment with a titanate-based, silicone-based, or aluminum-based coupling treatment agent.

20

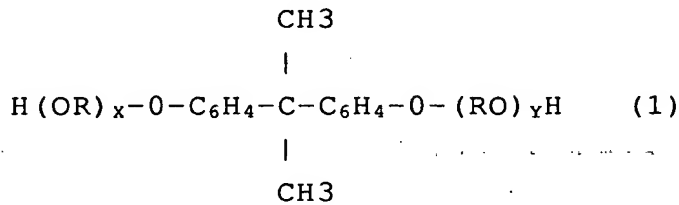
3. The toner as claimed in claim 1 or 2 characterized in that an average first-order particle diameter of the titanium black fine particle is 0.005 through 0.04  $\mu\text{m}$ .

30

4. The toner as claimed in any of claims 1 through 3 characterized in that a color changing temperature from black to white is within a range of 70 through 200°C.

35

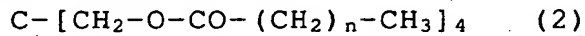
5. The toner as claimed in any of claims 1 through 4 characterized by comprising at least a polyester resin of which a raw material is an alkylene oxide adduct of bisphenol A represented by the following formula (1):



(R represents an ethylene or propylene group and X and Y represent integers equal to or more than 1, respectively, in the formula.)

15

6. The toner as claimed in any of claims 1 through 5 characterized by comprising 0.01 through 10 parts by weight of a compound represented by the following formula (2):



(n is an integer equal to or more than 14.)

per 100 parts by weight of a binder resin.

7. The toner as claimed in any of claims 1 through 6 further comprising an infrared-ray absorbent.

35

8. The toner as claimed in claim 7 characterized in that the infrared-ray absorbent is one selected from the group consisting of aminium, diimmonium, naphthalocyanine, and tin oxide.

5

9. An image formation method comprising a  
10. process of fixing a toner image on a recording  
medium onto a surface thereof by flash exposure;  
characterized by employing a toner having  
a surface to which a titanium black adheres, the  
titanium black being subjected to a hydrophobicity-  
15 providing treatment and changed in color from black  
to white by flash light, the flash light having  
energy of 0.5 through 3.0 J/cm<sup>2</sup> and luminous time of  
500 through 3000  $\mu$ s.